UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/144,851 | 09/01/1998 | YUKIHISA KATO | KATO=15 | 5275 |

1444 7590 02/17/2004

BROWDY AND NEIMARK, P.L.L.C.
624 NINTH STREET, NW
SUITE 300
WASHINGTON, DC 20001-5303

| EXAMINER | |
|---|---|
| SHERRER, CURTIS EDWARD | |
| **ART UNIT** | **PAPER NUMBER** |
| 1761 | |

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Paper No. 020604

Application Number: 09/144,851
Filing Date: September 01, 1998
Appellant(s): KATO ET AL.



Anne M. Kornbau
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/28/03.

***(1) Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

***(2) Related Appeals and Interferences***

A statement identifying the related appeals and interferences that will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

***(3) Status of Claims***

The statement of the status of the claims contained in the brief is correct.

***(4) Status of Amendments After Final***

The appellants' statement of the status of amendments after final rejection contained in the brief is correct.

***(5) Summary of Invention***

The summary of invention contained in the brief is correct so far as it reflects the comments found in the instant specification.

***(6) Issues***

The appellants' statement of the issues in the brief is correct.

***(7) Grouping of Claims***

Appellants' brief includes a statement that claim 31 does not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

***(8) Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

***(9) Prior Art of Record***

Seike, Jap. Pat. No. 04190780, 07/09/92.

Jackson, Wine Science, 1994, Academic Press, pp. 229 and 279-80.

***(10) Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 21-24 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seike (Jap. Pat. No. 04190780) in view of Jackson (Wine Science, pp. 229 and 279-80).

Seike teaches the production of vinegar from citrus fruits, such as lemons, whereby the fruit juice is clarified with an enzyme, acid adjusted, sterilized, cooled, alcohol is added, it is inoculated with acetic acid bacteria and fermented, matured, filtered and juice from unripe fruit is added. (Pages 2-3 of translation).

Seike teaches that cited above, including the modification of the pH, e.g., lowering the acidity, but does not teach the claimed citric acid reduction treatment. Rather, the acidity is modified through the use of sodium citrate. (Page 6).

Jackson teaches the reduction of grape juice and/or wine acidity by means of precipitation, e.g., calcium carbonate addition, and column ion exchange. It would have been obvious to those of ordinary skill in the art to deacidify the fruit juices of Seike in order to modify the flavor of the final product.

Appellants' attention is invited to *In re Levin*, 84 USPQ 232 and the cases cited therein, which are considered in point in the fact situation of the instant case, and wherein the Court stated on page 234 as follows:

> This court has taken the position that new recipes or formulas for cooking food which involve the addition or elimination of common ingredients, or for treating them in ways which differ from the former practice, do not amount to invention, merely because it is not disclosed that, in the constantly developing art of preparing food, no one else ever did the particular thing upon which the appellants asserts his right to a patent. In all such cases, there is nothing patentable unless the appellants by a proper showing further establishes a coaction or cooperative relationship between the selected ingredients which produces a new, unexpected, and useful function. *In re Benjamin D. White*, 17 C.C.P.A

(Patents) 956, 39 F.2d 974, 5 USPQ 267; *In re Mason et al.*, 33 C.C.P.A. (Patents) 1144, 156 F.2d 189, 70 USPQ 221.

While the reference cited above do not disclose the amounts of the fruit juice used, the specifically claimed citric acid content it is considered that in view of the court's holding in *In re Levin* it would have been obvious to those in the vinegar processing industry to modify these parameters as they are result effective variables that are commonly optimized.

Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Seike in view of Jackson and in further view of Castillon *et al.* (U.S. Pat. No. 5,415,775)(Castillon").

Seike in view of Jackson teaches that cited above but neither reference teaches the use of ultrafiltration in connection with vinegar. While such a limitation is considered to be notoriously well known in the art, Castillon teaches that ultrafiltration membranes are commonly used to purify vinegar (col. 5, lines 34-39) and therefore it would have been obvious to those of ordinary skill in the art to ultrafilter the vinegar of Seike so as to increase its purity.

***(11) Response to Argument***

Appellants argue that that, while the secondary reference, Jackson, clearly teaches the modification of juice acidity using the claimed calcium carbonate, said reference "discloses that juice and must are typically deacidified **after fermentation**." (Brief, page 7, emphasis theirs). Because Jackson provides those with ordinary skill in the art a teaching to reduce juice acidity with calcium carbonate, those of ordinary skill would perform such a step.

While Jackson discusses the effects of calcium carbonate in the context of grape juice, calcium carbonate would nonetheless be an obvious deacidification agent for those of ordinary skill in any juice. Seike recognizes the need to reduce the acidity in lemon juice before fermentation. Jackson states that deacidification of excessively acidic juice low in pH may be neutralized by the addition of calcium carbonate. (Page 229, bottom, first column). Jackson also states that deacidification "with calcium carbonate is probably the most common procedure . . . ." (Page 279, top, second column). Motivation exists to combine the cited references because the selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945). Also see, *In re Levin*, cited above.

While the secondary reference states that there are some known drawbacks to using the carbonate for deacidification, it is assumed that appellants are subject to the same drawbacks and therefore, the claimed process does nothing to solve these drawbacks.

It is noted that on page 5 of the Brief, that appellants state that the present invention provides a method for preparing vinegar from citrus fruit juices that contain a higher percentage of citric acid than apple juice or grape juice . . . ." (Page 5, last ¶). This asserted aspect of the invention is not claimed nor disclosed and therefore is not found persuasive.

Appellants discuss the possible detriments to a juice's flavor when using an alkaline agent to modify the juice pH. Because the rejection is based on the combination of teachings found in Sieke in view of Jackson, this argument is not found persuasive. The fact that appellants have recognized another advantage which would flow naturally from following the

suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Lastly, appellants address the rejection that incorporates Castillon as the tertiary reference in order to teach the notoriously well known use of ultrafiltration membranes to clarify vinegars. Appellants argue that this "adds nothing to the teaching of Seike and Jackson to deacidify the citrus fruit juice prior to the fermentation by removing the citric acid from the juice . . . ." (Brief, page 15, last ¶). Because Castillon was cited only to teach the well known use of ultrafiltration, the appellants statement is correct. Nevertheless, claim 31 is properly rejected because independent claim 21 is properly rejected.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Curtis E. Sherrer, Esq.
Primary Examiner
Art Unit 1761

February 5, 2004

Conferees
Milton Cano
Glenn Caldarola

Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700

MILTON I. CANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

BROWDY AND NEIMARK, P.L.L.C.
624 NINTH STREET, NW
SUITE 300
WASHINGTON, DC 20001-5303